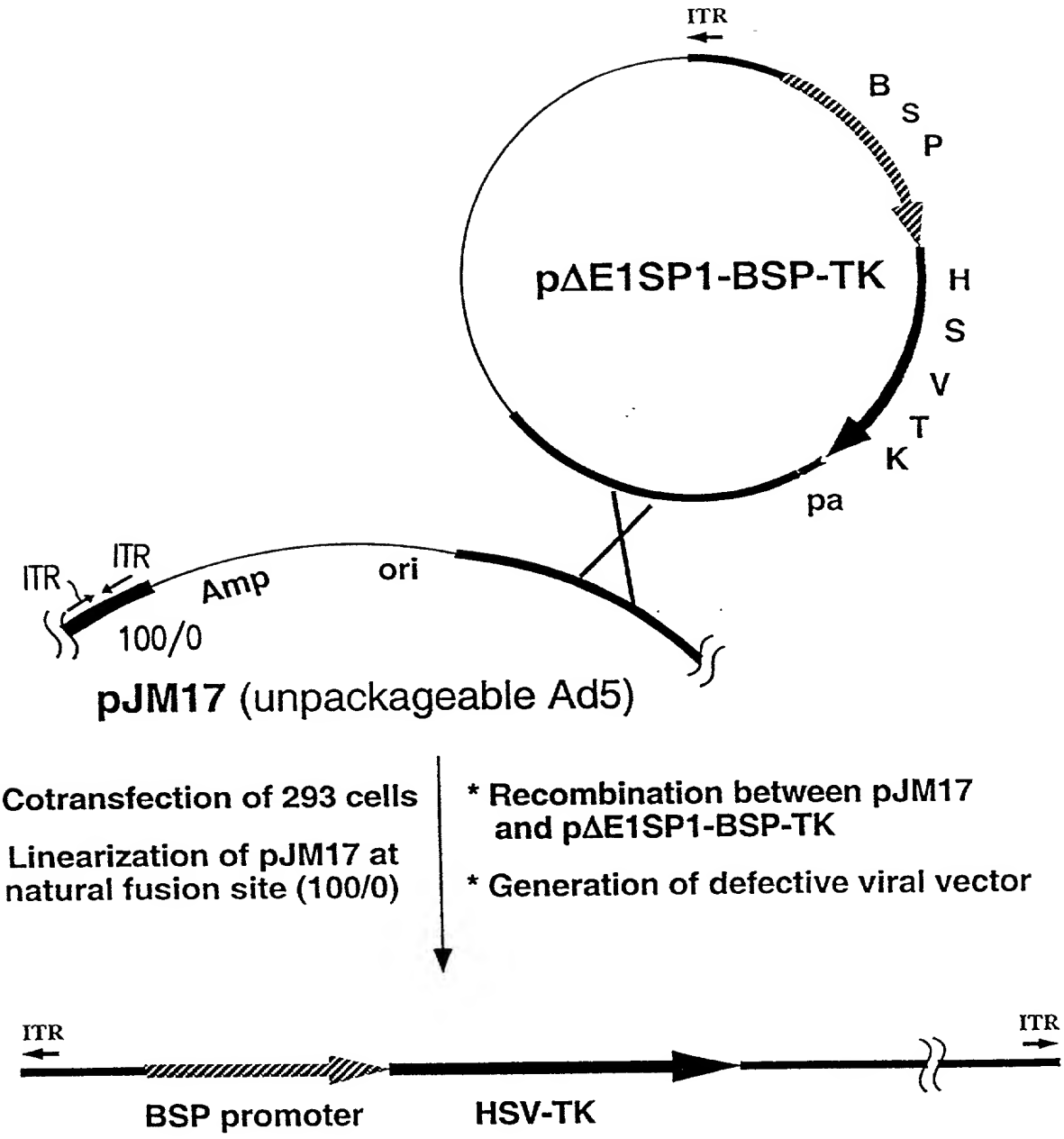


BSP-HSV-TK expressing recombinant adenovirus

FIG.1

Serum free/phenol free, DMEM, F12
-/+ Vitamin c and beta-glycerol phosphate

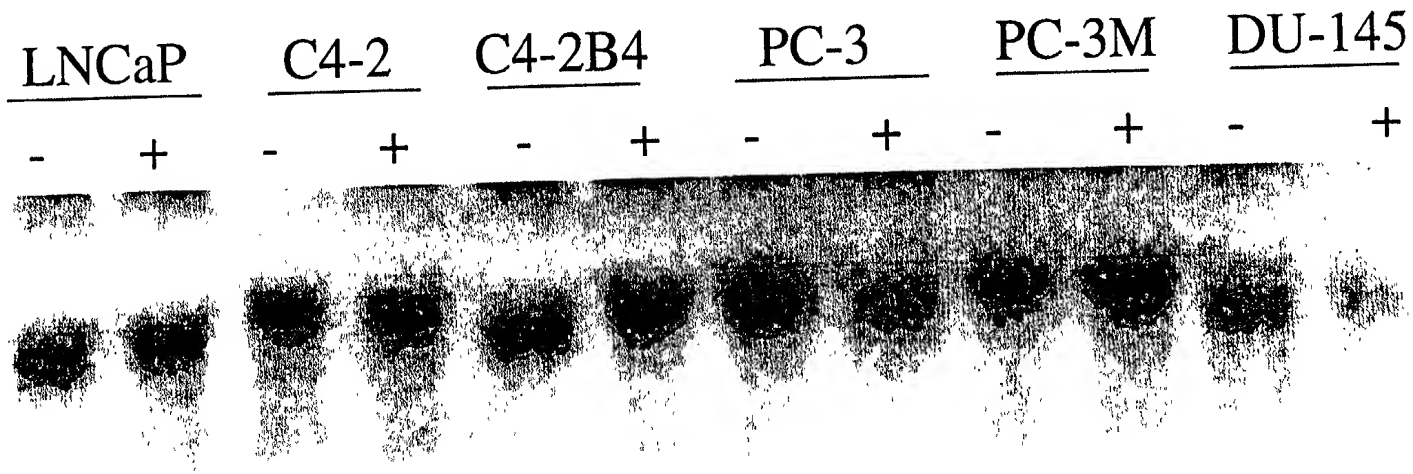


FIG.2

T00230 "60n8860

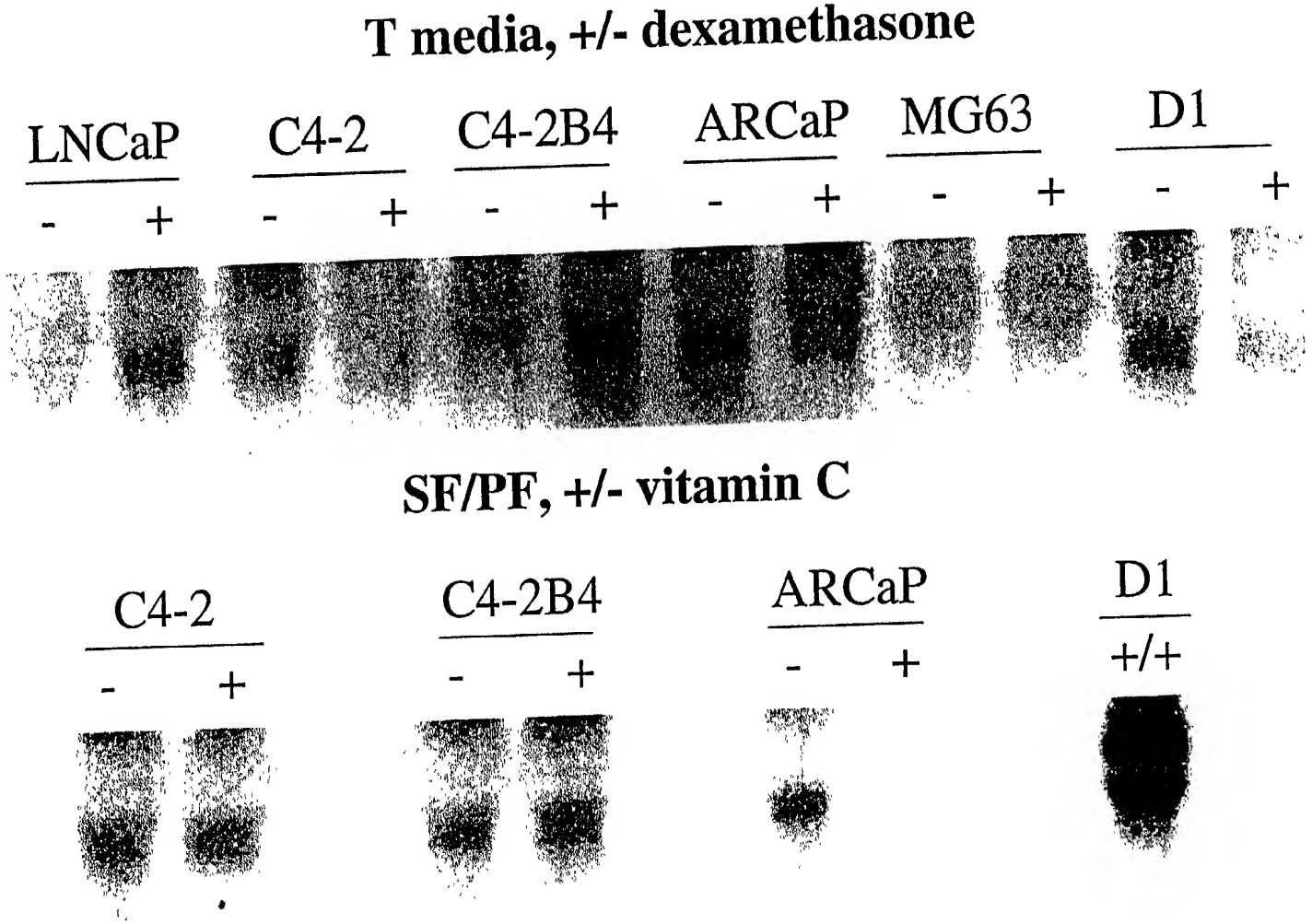


FIG.3

T00250 "60n8860

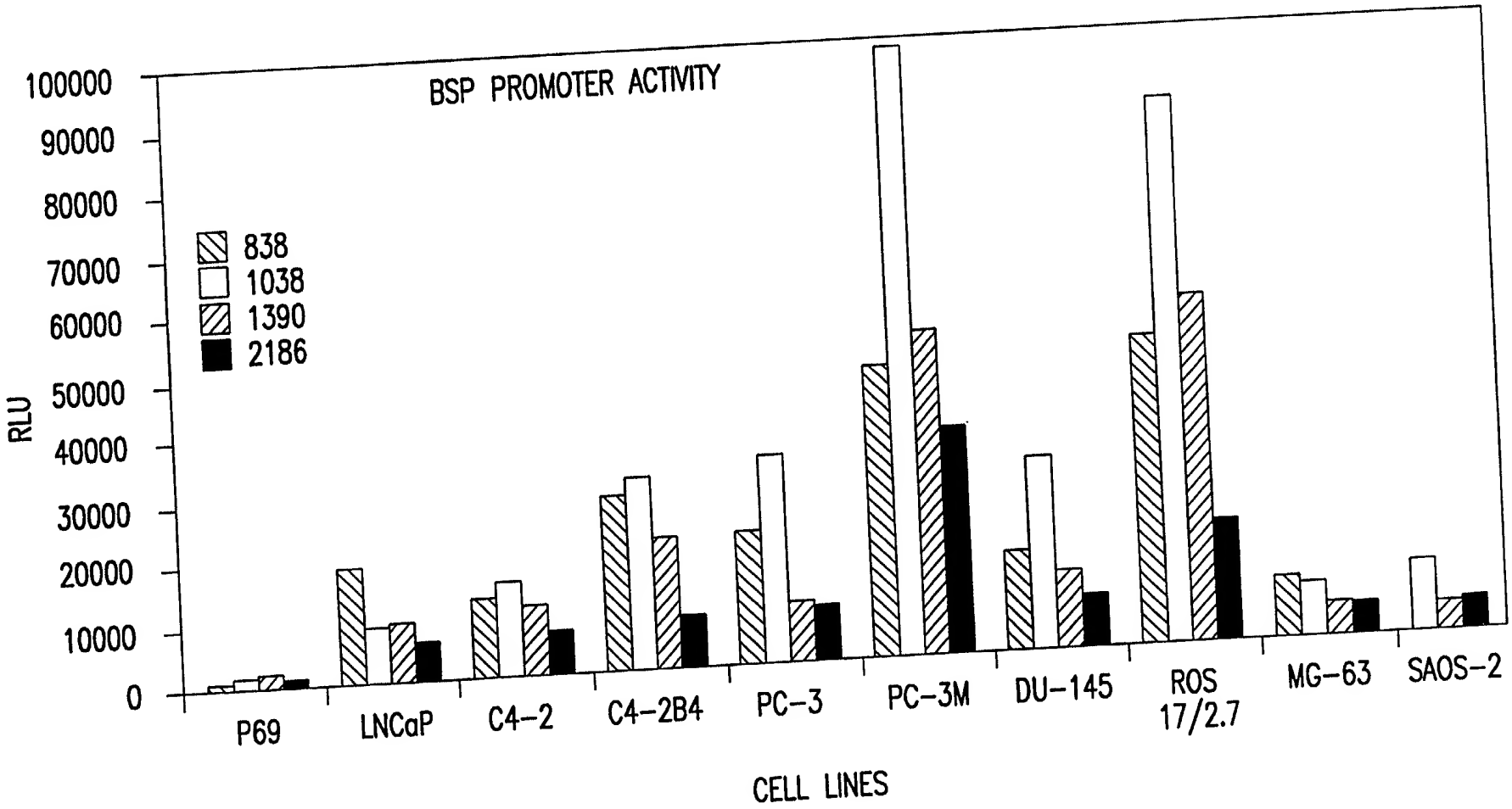


FIG.4

T00290 66U1886U

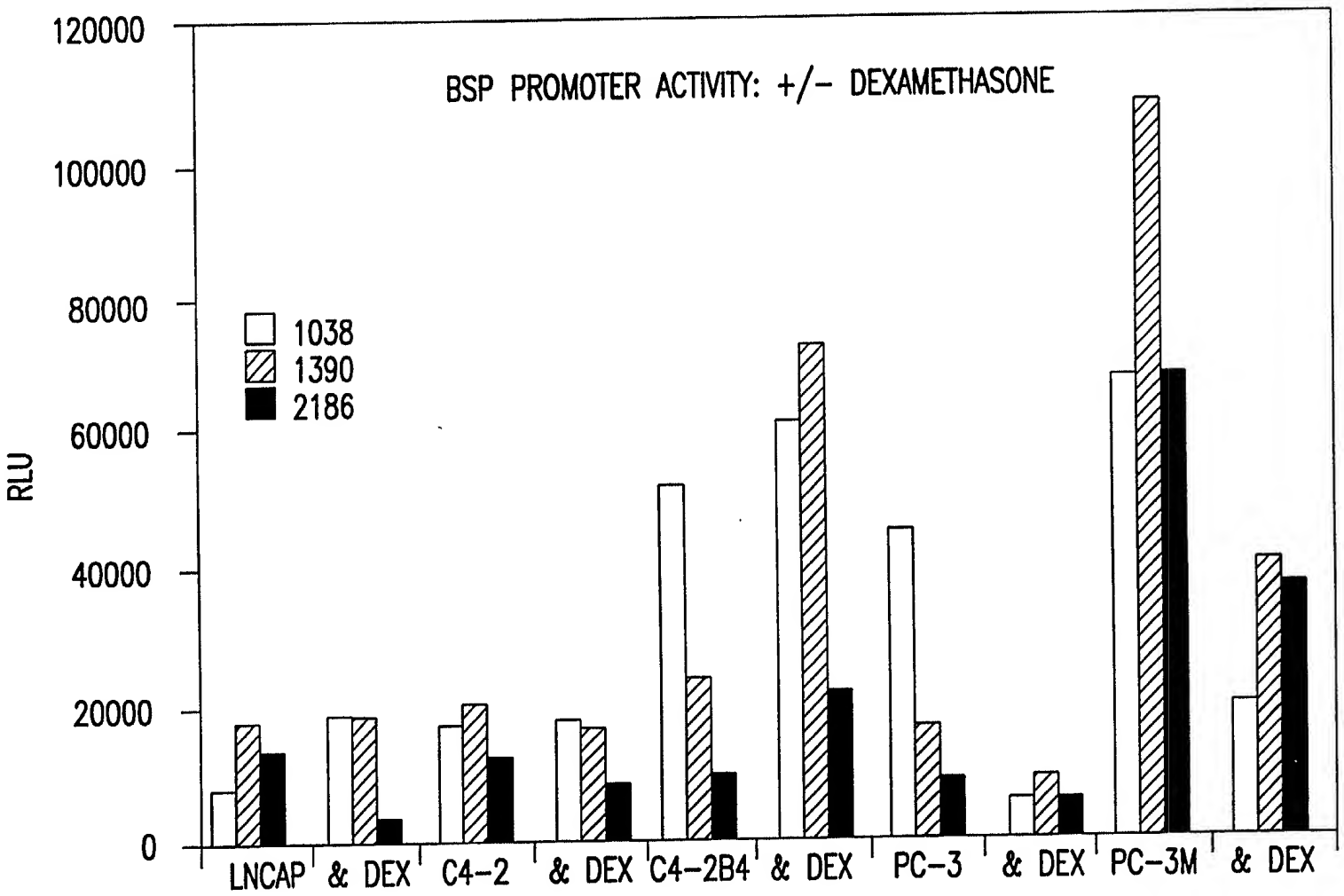


FIG.5

T00250 "60h8868

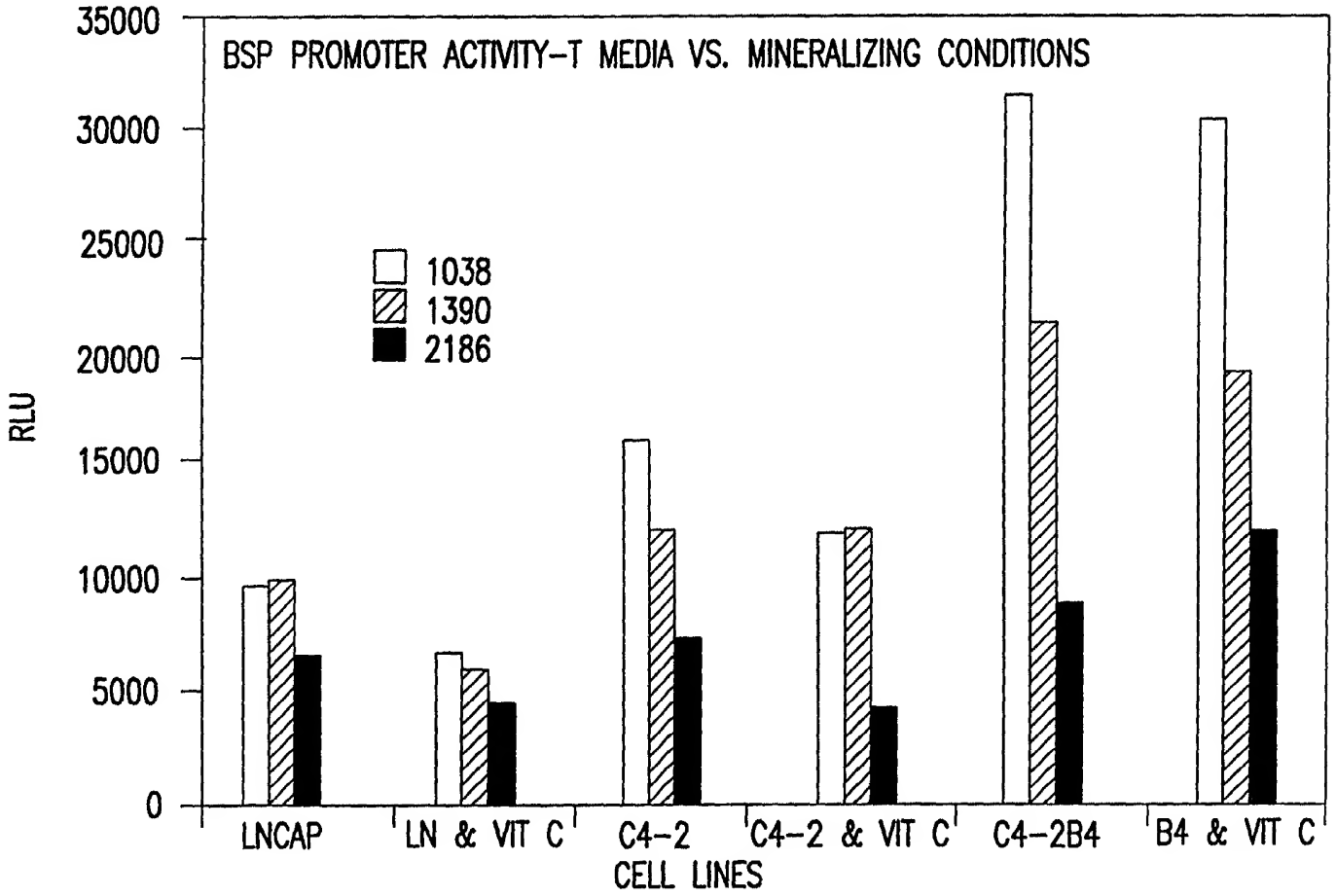


FIG.6A

T00250 "60h9860

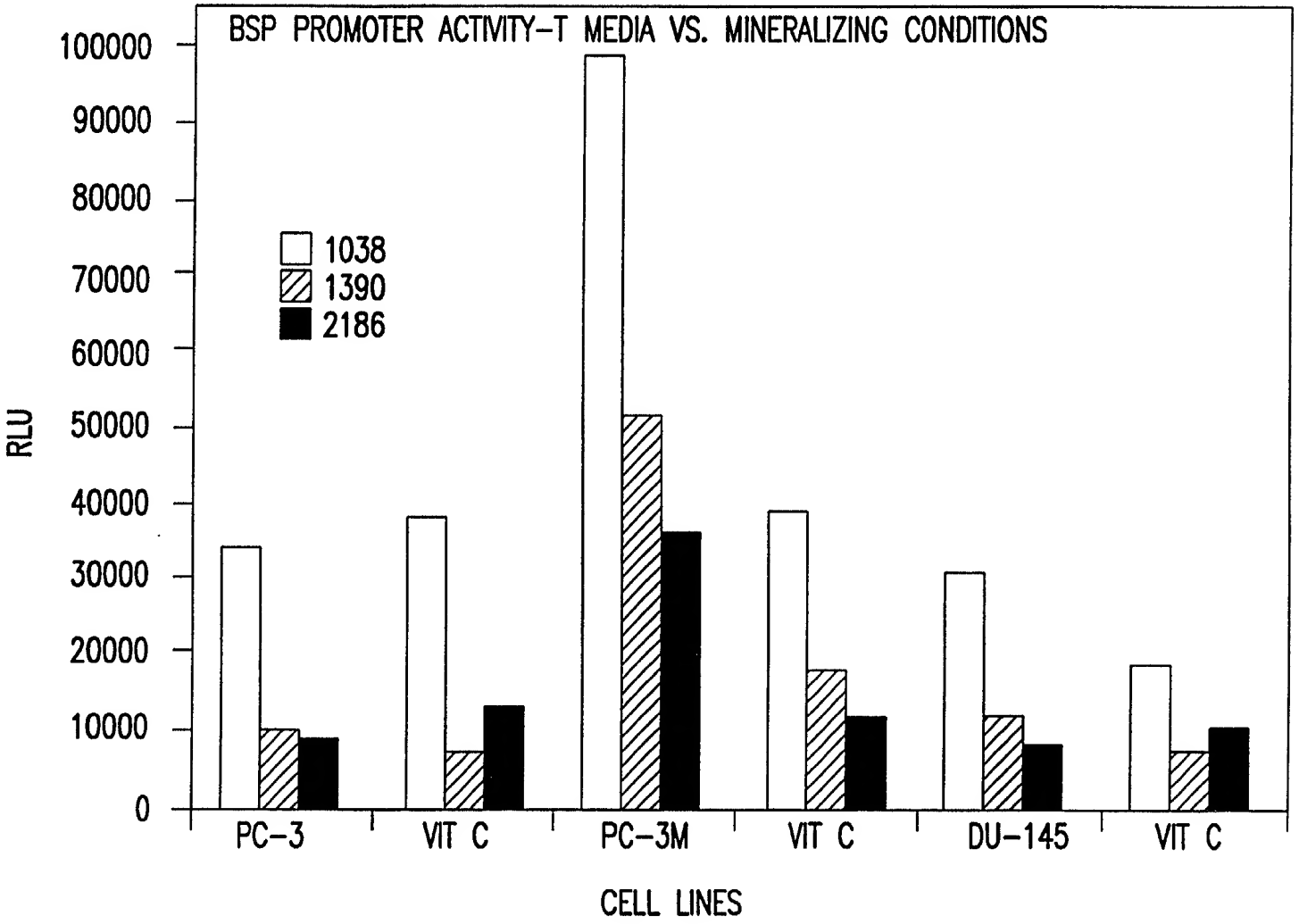


FIG.6B

EP 0 902 090 A2

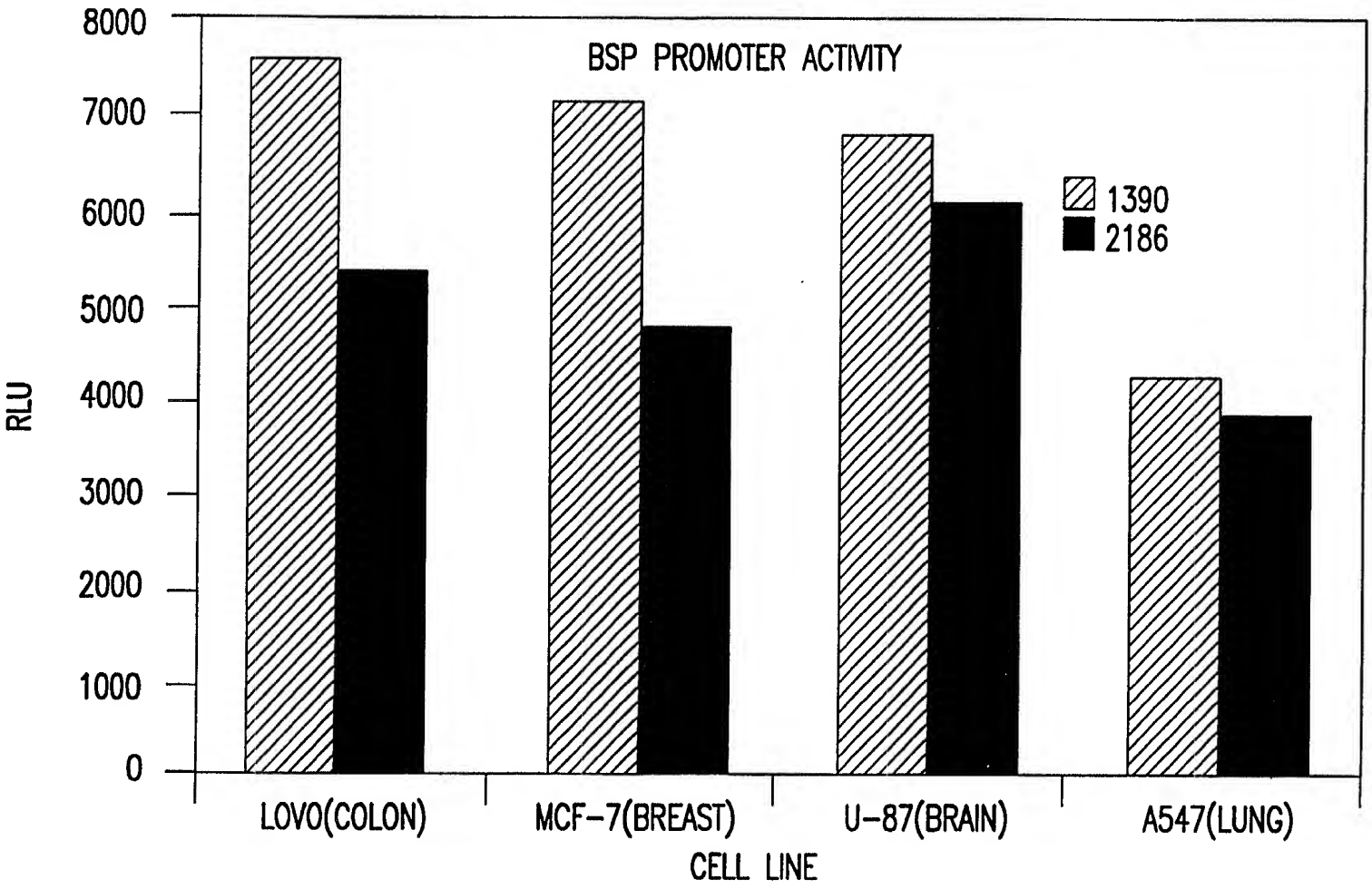


FIG.7

```
ggatcccttcctta caccttatac aaaaatcaat tcaagatgga ttaaagactt aaacgttaga cctaaaacca -2111
    taaaaaccct agaagaaaac ctaggcatta ccattcagga cataggcatg ggcaaggact tcatgtctaa -2041
    aacaccaaaa gcaaggcaac aaaagacaaa attgacaaat gggatctaat taaactaaag agcttctgca -1971
    cagcaaaaga aactaccatc agagtgaaca ggcaacctac aaaatgggag aaaattttcg caacctactc -1901
    atctgacaaa gggctaatat ccagaatcta caatgaactc aaacaaattt acaagaaaaa aacaaacaac -1831
    cccatcaaaa agtgggcaaa ggacttgaac agacacttct caaaagaaga catttatgca gccaaaaaac -1761
    acatgaaaaa atgctcacca tcactggcca tcagagaaat gcaaatcaaa accactatga gataccatct -1691
    cacaccagtt agaatggcaa tcattaaaaa gtcaggaaac aacaggtgct ggagaggatg tggagaaata -1621
    ggaacacttt tacgctgttg gtgggactgt aaactagttc aaccattgtg gaagtcagtg tggcaattcc -1551
    tcagggatct agaactagaa ataccatttg acccagcaat cccattactg ggtatatacc caaaggacta -1481
    taaatcatgc tgctataaag acacatgcac agctatgttt attgcggcat tattcacaat agcaaagact -1411
    tggaaccaac ccaaatgtcc aacaatgata gattggatta agaaaatgtg gcacatatac accatggaat -1341
    actatgcagc cataaaaaat gatgagttca tgtcctttgt ggggacatgt atgaaattgg aaaccatcat -1271
    tctcagtaaa ctatcacaag aacaaaaaac caaacaccac atattctcac tcataggtgg gaattgaaca -1201
    atgagatcac atggacacag gaaggggaac atcacactct ggggactgtt gtggggtggg gggagtaagg -1131
    ggagggatag cattgggaga tatacctaat gctagatgat gagttagtgg gtgcagcaca ccagcatggc -1061
    acatgtgtac gtatgtaact aacctgcaca caatgtgcac atgtacccta aaacttaaag tataataata  -991
    aaaaaaatta agagaaaaaa agaaaaaaaa tgatattcat taatttttga tttctcaagc agacttcgca  -921
    actggaggaa gaataaaatg actagactag gagaatatgc aaactattaa gctagatttc cctttataaa  -851
    ttaaaaaatt agtactttag tttatcaatc cattctttgt ggtgttggtt tcatgaatca tttcaaaaac  -781
```

FIG.8A

```
aatggatcac tcctgctagc tctagtcatt ttgttattct cataggaaaa aaattaaata tgaaaatgaa  -711
tagaaaagat atatatagaa gcccaagaaa aatcagctga cctcacatgc acgacaggaa ggccacataa  -641
atggacaata tacagagatt taatttacaa aacaaaatat aaaatctgcc tctcagtggt atgattctca  -571
aaagttctaa cttttatact cagcatcatg ttttagcaac tatatgttac aaagtctgac cgacttaatc  -501
atatcaactt taatttatga gtcaatgaag tatatttcag gaggaaacat caaatgatat taaaatattg  -431
atggttcatc tgctcctttc ccttattatt tagtttttct ttctttttt agctaaacta atgtaaaatt  -361
atatctaatg acagcaagct ttcctttctt tcgacatagt gaaaacttgt gtaattatga aatttttaaa  -291
aggttaaagc ctttgttatt tattttaatt caaatccagt atattattat acatattcgg agcccaaact  -221
attcatcttc atctaaacct tcaattaaat tccacaatga aaacctcttg gctctagaat cacgtttctt  -151
gtttattcaa ctgagcctgt gtcttgaaaa agtgttgaag tttgggggtt ttctggtgag aatccacgtt   -81
ctgacatcac cttggtcgtg acagtgattg gctgttggaa ggcaaagaag agtttatagc cagcaagagc   -11
aagtgaatga gtgagtgaga gggcagagga aatactcaat ctgtgccact cactgccttg agcctgcttc    60
ctcactccag gactgccaga gggtaagatt taatagaaca acttcattat cataaaatta gacactccat   130
agtttacatc tctgaacttg gctttgaatt tttcatttta atgatgttat tgcattgtac atggtttaat   200
aattatttat cattaaactg gcacttcaga ttttaaa                                       237
```

FIG.8B

TOP29D 960n8860

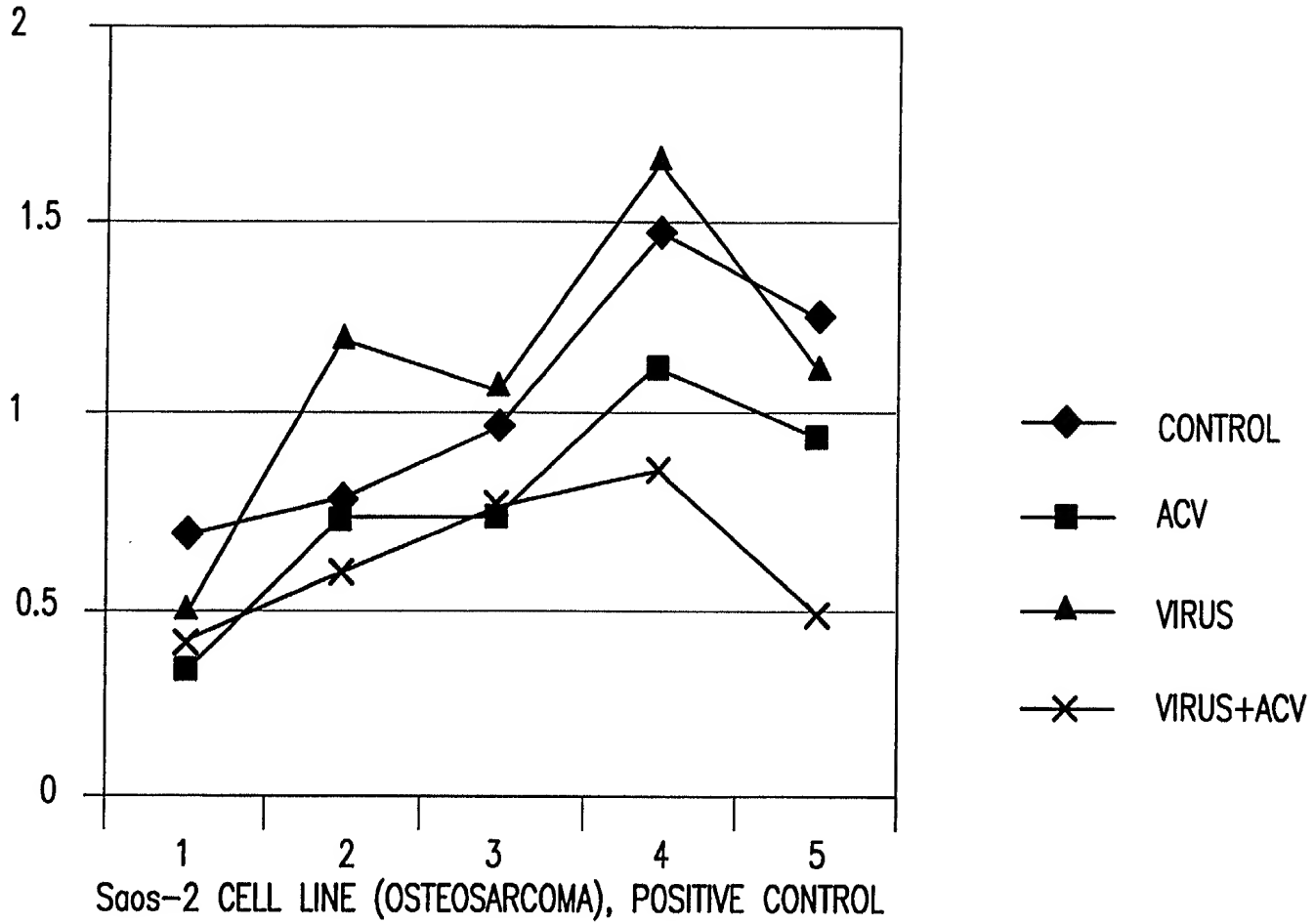


FIG.9A

T06690 "60h8860

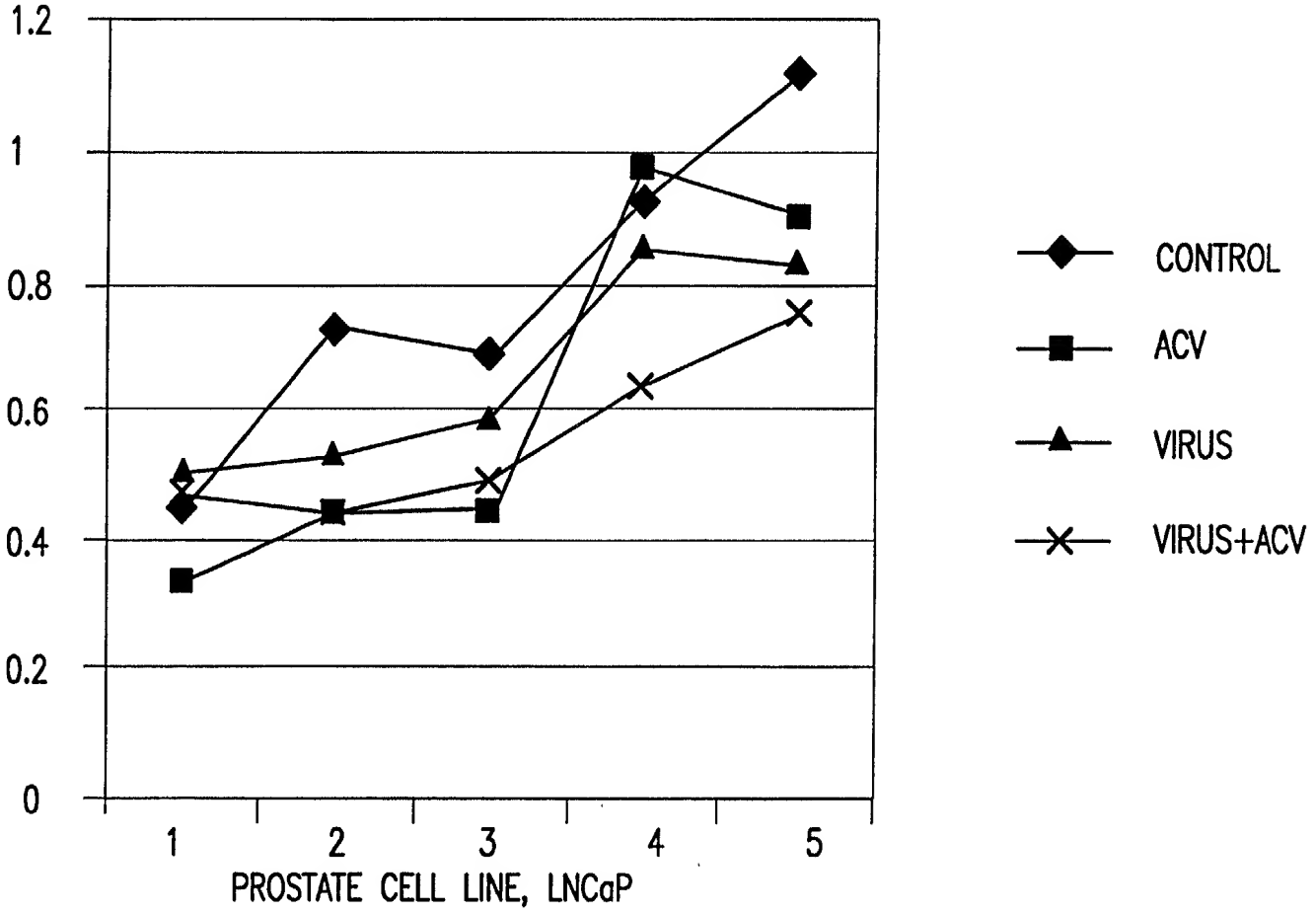


FIG.9B

T00290 660n660

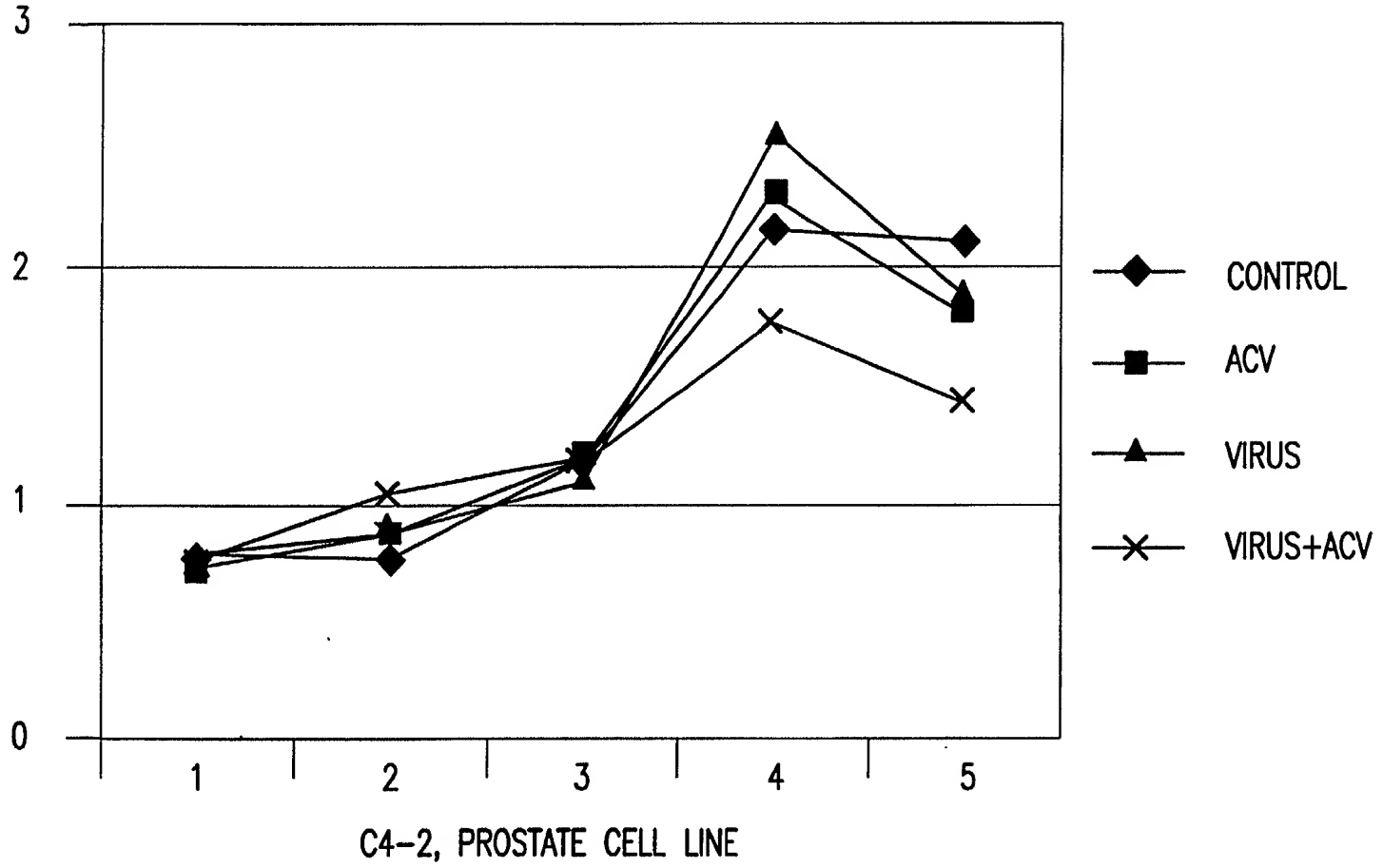
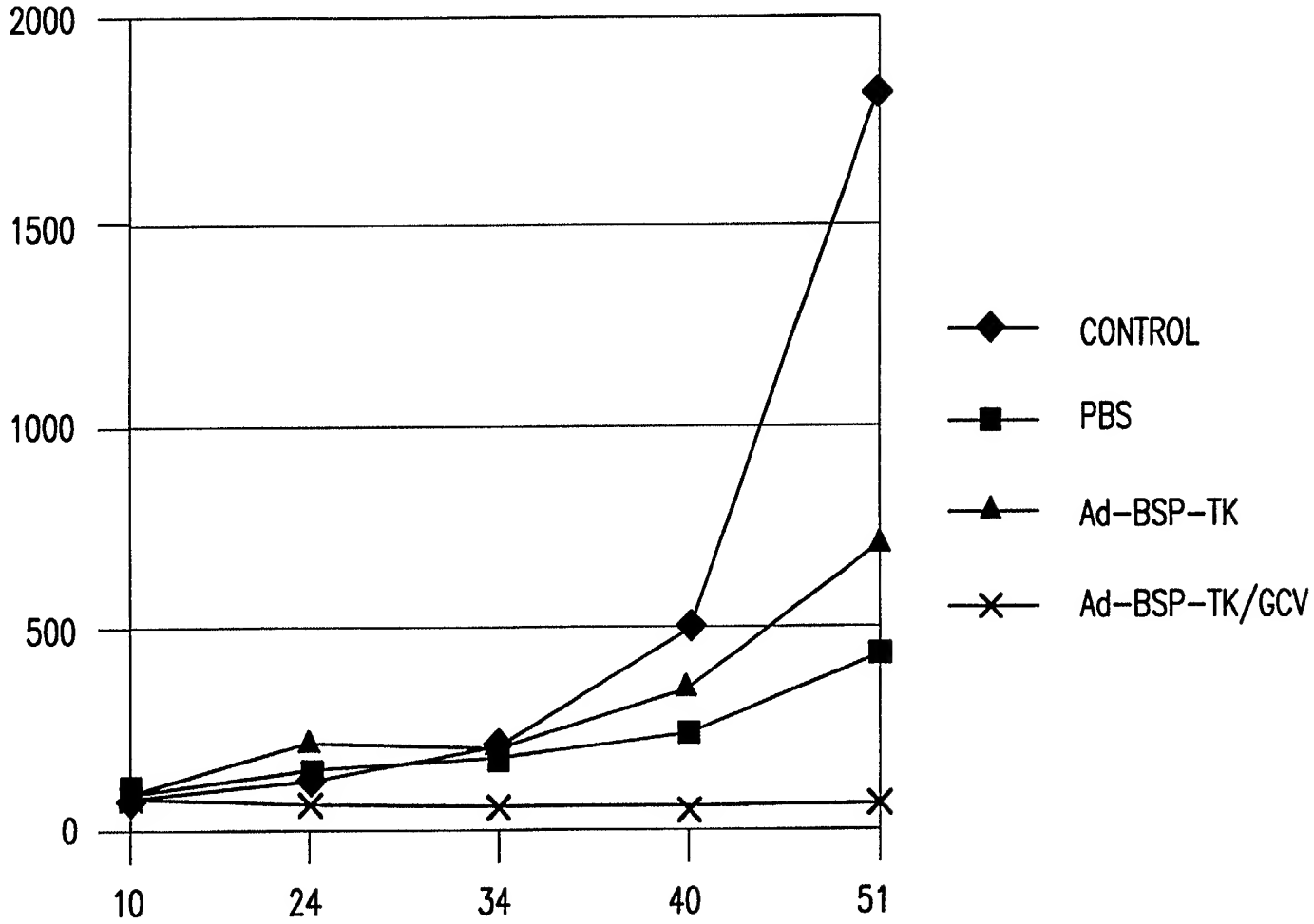


FIG.9C

T00290 "86068860



VIRUS(Ad-BSP-TK) OR PBS GIVEN BY INTRATUMORAL INJECTION ON DAYS 10,17,24,30. GCV GIVEN I.P. FROM DAY 10 TO 40.

FIG.10

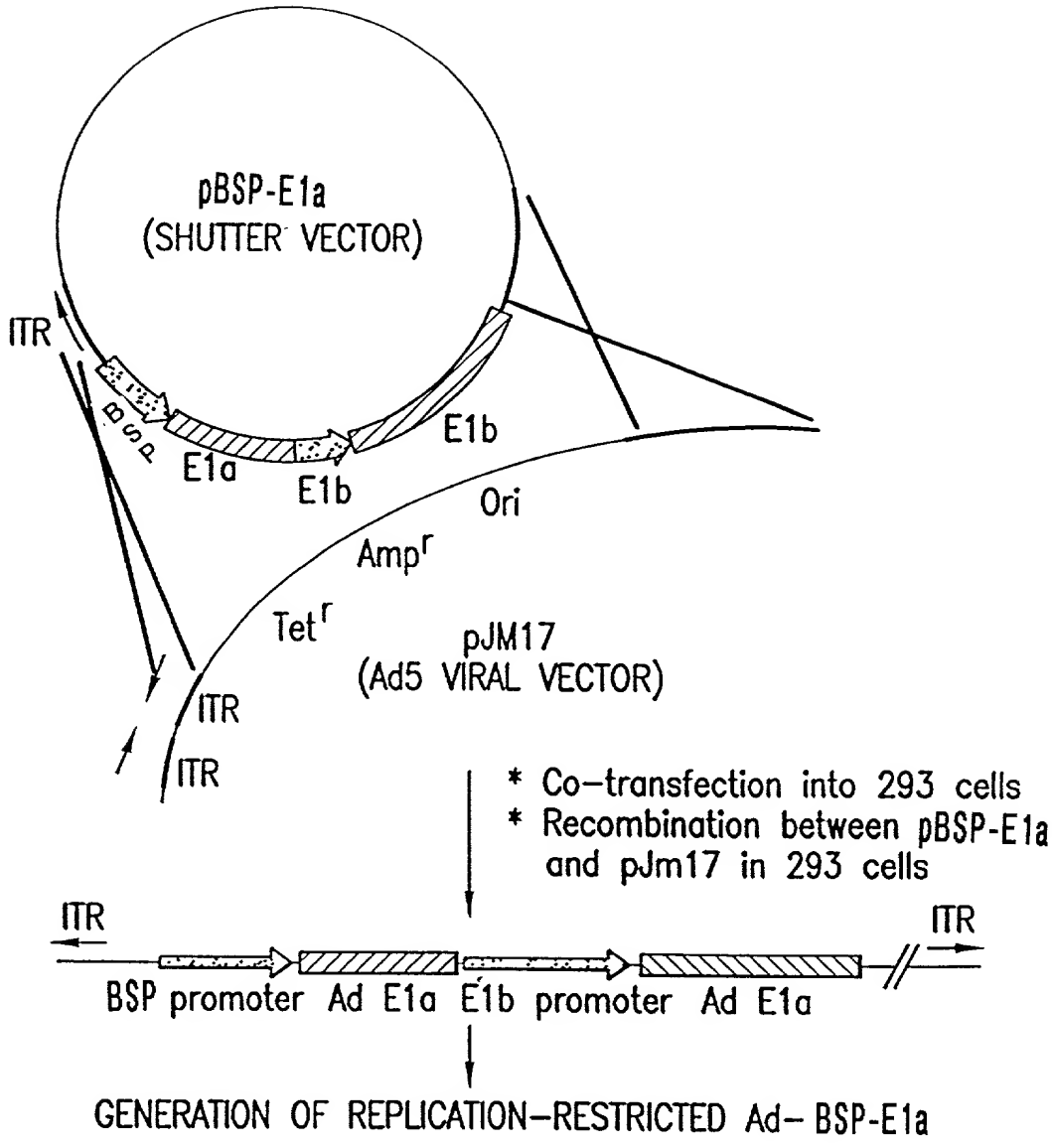

pBSP-E1a
(SHUTTER VECTOR)
ITR
BSP
E1a
E1b
E1b
Ori
Amp^r
Tet^r
pJM17
(Ad5 VIRAL VECTOR)
ITR
ITR
* Co-transfection into 293 cells
* Recombination between pBSP-E1a and pJm17 in 293 cells
ITR
ITR
BSP promoter Ad E1a E1b promoter Ad E1a
GENERATION OF REPLICATION-RESTRICTED Ad- BSP-E1a

FIG. 11